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PCMT1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant PCMT1.
Catalog # AT3235a

Product Information

Application	WB, E
Primary Accession	P22061
Other Accession	NM_005389
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	1D6
Calculated MW	24636

Additional Information

Gene ID	5110
Other Names	Protein-L-isoaspartate(D-aspartate) O-methyltransferase, PIMT, L-isoaspartyl protein carboxyl methyltransferase, Protein L-isoaspartyl/D-aspartyl methyltransferase, Protein-beta-aspartate methyltransferase, PCMT1
Target/Specificity	PCMT1 (NP_005380, 117 a.a. ~ 225 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	PCMT1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

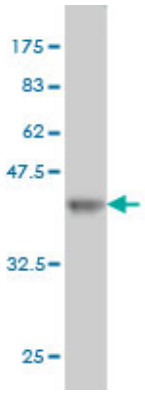
Background

Three classes of protein carboxyl methyltransferases, distinguished by their methyl-acceptor substrate specificity, have been found in prokaryotic and eukaryotic cells. The type II enzyme catalyzes the transfer of a methyl group from S-adenosyl-L-methionine to the free carboxyl groups of D-aspartyl and L-isoaspartyl residues. These methyl-accepting residues result from the spontaneous deamidation, isomerization, and racemization of normal L-aspartyl and L-asparaginyl residues and represent sites of covalent damage to aging proteins PCMT1 (EC 2.1.1.77) is a protein repair enzyme that initiates the conversion of abnormal D-aspartyl and L-isoaspartyl residues to the normal L-aspartyl form.

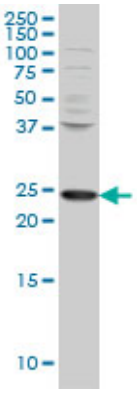
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Proteome analysis of the thalamus and cerebrospinal fluid reveals glycolysis dysfunction and potential biomarkers candidates for schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2010 May 14. PMID 20471030.Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.An association study of 45 folate-related genes in spina bifida: Involvement of cubilin (CUBN) and tRNA aspartic acid methyltransferase 1 (TRDMT1). Franke B, et al. Birth Defects Res A Clin Mol Teratol, 2009 Mar. PMID 19161160.Proteomic analysis of dorsolateral prefrontal cortex indicates the involvement of cytoskeleton, oligodendrocyte, energy metabolism and new potential markers in schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2009 Jul. PMID 19110265.

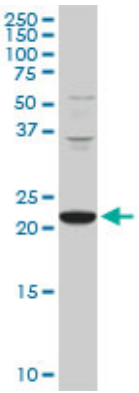
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.73 KDa) .

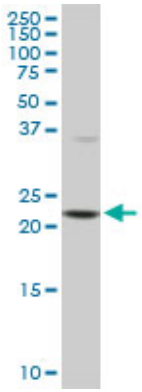


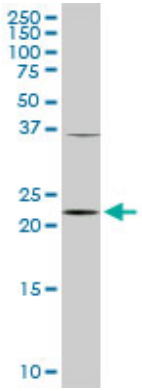
PCMT1 monoclonal antibody (M02), clone 1D6 Western Blot analysis of PCMT1 expression in HeLa ((Cat # AT3235a)



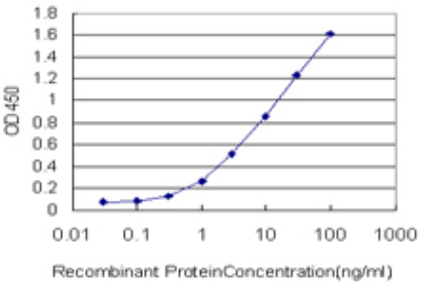
PCMT1 monoclonal antibody (M02), clone 1D6. Western Blot analysis of PCMT1 expression in PC-12 ((Cat # AT3235a)

PCMT1 monoclonal antibody (M02), clone 1D6. Western Blot analysis of PCMT1 expression in Raw 264.7 ((Cat # AT3235a)





PCMT1 monoclonal antibody (M02), clone 1D6. Western Blot analysis of PCMT1 expression in NIH/3T3 ((Cat # AT3235a)



Detection limit for recombinant GST tagged PCMT1 is approximately 0.1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.